# **Focus on Water Availability**



**Water Resources Program** 

**Revised August 2012** 

# Lower Chehalis & Upper Chehalis Watersheds, WRIAs 22 & 23

This focus sheet provides information on the availability of water for new uses in the Chehalis Watershed. This information provides a starting point for potential water users in determining the likelihood of obtaining a new water right for a future project or proposal in this area.

The Chehalis Watersheds, also known as Water Resource Inventory Areas (WRIAs) 22 and 23, are located in western Washington. These watersheds include the Chehalis, Newaukum, Skookumchuck, Satsop, Wynoochee, and Wishkah rivers, and numerous tributary creeks and streams.

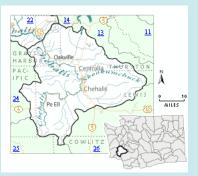
Annual precipitation in the Lower and Upper Chehalis Watersheds ranges from 40 inches in the lowland valleys to over 100 inches in the Cascade and Willapa foothills. Most of the precipitation arrives during the winter months when water demands are the lowest. Only a fraction becomes available for human and economic uses. During the summer, the snowpack is gone, there is little rain, and naturally low stream flows are dependent on groundwater inflow. At the same time, water demands for human uses, including irrigation, are at the yearly maximum. This means that groundwater and surface water are least available when water demands are the highest.

# Factors affecting water availability

This watershed is one of the most intensely farmed basins in western Washington, and much of the water has already been spoken for. There is limited water available for new uses in the Chehalis watershed, especially given that river levels need to be maintained to ensure adequate water quality and fish migration. Increased demands from population growth, naturally low summer and early fall streamflow levels, and impacts from climate change add to the challenge of finding new water supplies in WRIAs 22 and 23.

Chapter 173-522 WAC (<a href="www.ecy.wa.gov/pubs/wac173522.pdf">www.ecy.wa.gov/pubs/wac173522.pdf</a>) is the instream flow rule for the Lower and Upper Chehalis River watersheds. This rule, adopted in 1976, establishes minimum instream flows on other streams and creeks (see Chapter 173-522-020 WAC).





#### **Definitions**

**Aquifer**: A rock formation that is capable of storing and transmitting groundwater.

Instream flow: A stream flow protected in a rule. These rules specify the amount of water needed in a particular place for a defined time, and typically follow seasonal variations. They are the flow levels needed in the river to protect and preserve instream resources and uses.

**Seawater intrusion**: The movement of salt water into freshwater aquifers.

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There is no water set aside in reserves for future uses in these watersheds. Water for single domestic inhouse use is exempt from the instream flow rule. Applicants seeking new water appropriations for other uses will likely need to provide mitigation to offset the impacts their use of water will have on surface water bodies.

#### **Indian Tribes' review**

Both the Chehalis and Quinault Indian Tribes are very concerned about maintaining flows and fish habitat in the watershed. By request, Ecology notifies the tribes of all new water right applications and decisions.

#### **Seawater Intrusion near the Pacific Ocean**

Groundwater in some areas located near the Grays Harbor and Pacific Ocean shoreline has the potential for seawater intrusion.

## Water supply available for further appropriation

Potential water supply in the Chehalis watersheds include municipal suppliers and private water supply companies.

The groundwater permit exemption allows certain users of small quantities of ground water (most commonly, single residential well owners) to construct wells and develop their water supplies without obtaining a water right permit from Ecology. For more information about the groundwater permit exemption, refer to www.ecy.wa.gov/pubs/fwr92104.pdf.

If an applicant is not able to connect to an existing water system and more water is needed than can be obtained from a permit-exempt well, then the water right application may be processed through the Cost Reimbursement Program. (See: www.ecy.wa.gov/pubs/0511016.pdf)

For a more complete look at alternatives for water right application processing, refer to "Alternatives for Water Right Application Processing" www.ecy.wa.gov/pubs/1111067.pdf. The applicant will likely need to develop a mitigation strategy to offset any impacts their water use will have on surface waters.

## Pending water right applications in this watershed

Washington water law is based on the "prior appropriation" system, often called "first in time, first in right." Applications for water from the same source must be processed in the order they are received.

Ecology asks anyone who needs a water right (new, change, or transfer) to submit the pre-application consultation form and meet with us to review your water supply needs and project proposal.

- Apply for a New Water Right http://www.ecy.wa.gov/programs/wr/rights/newrights.html
- Apply to Change or Transfer a Water Right or Claim http://www.ecy.wa.gov/programs/wr/rights/change\_transfer\_use.html

The map in this document shows some of the factors that will be considered when evaluating water right permit applications. Here are some information sources to assist you with your research:

- Locate and research water rights on land parcels anywhere in the state (Water Resource Explorer) http://www.ecy.wa.gov/programs/wr/info/webmap.html
- Pending Water Right Applications by County http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html
- Subscribe to a water right application RSS feed for a county or WRIA <a href="http://www.ecy.wa.gov/programs/wr/rights/wr\_app\_rss.html">http://www.ecy.wa.gov/programs/wr/rights/wr\_app\_rss.html</a>
- WRIA map showing the total number of water right claims, certificates, permits and applications <a href="http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf">http://www.ecy.wa.gov/programs/wr/rights/Images/pdf/waterright-wria-maps.pdf</a>
- Search and view well reports using a variety of search tools https://fortress.wa.gov/ecy/waterresources/map/WCLSWebMap/default.aspx

#### For more information

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